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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/538,973

06/14/2005

Mats Dahlback

1026-0003WOUS

9490

49698 7590 08/19/2008

MICHAUD-DUFFY GROUP LLP  
306 INDUSTRIAL PARK ROAD  
SUITE 206  
MIDDLETOWN, CT 06457

EXAMINER

ZHU, WEIPING

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

08/19/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/538,973	<b>Applicant(s)</b> DAHLBACK, MATS	
	<b>Examiner</b> WEIPING ZHU	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-21, 23 and 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-21, 23 and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 14, 2008 has been entered.

### ***Status of Claims***

2. Claims 18-21, 23 and 31 are currently under examination wherein claim 18 has been amended and claim 31 has been newly added in applicant's amendment filed on July 14, 2008. The previously presented claim 26 and claims 27-30 drawn to a non-elected invention have been cancelled in the same amendment.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 18-21, 23 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlback (US 6,149,738) in view of Garzarolli et al. (US 6,167,104).

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With respect to claims 18-21, 23 and 31, Dahlback ('738) discloses a method of producing and treating a sheet for a component in a fuel assembly for a nuclear light water reactor comprising (col. 4, line 65 to col. 5, line 42):

producing a sheet of a Zr-base alloy by forging, hot-rolling and cold-rolling in a number of steps, wherein said alloy contains by weight at least about 96% of Zr;

carrying out a  $\beta$  quenching when the sheet has been produced in the finished dimension or almost finished dimension; and

heat treating the sheet after the  $\beta$  quenching in a temperature range of 600-800° C (i.e. the  $\alpha$ -phase temperature range of the alloy).

The heat treatment temperature range of Dahlback ('738) overlaps the claimed temperature ranges in the instant claims 20 and 21. A prima facie case of obviousness exists. See MPEP 2144.05 I.

Dahlback ('738) does not disclose that the sheet is stretched by 0.1% to 7% or 0.2% to 4% in a direction corresponding to a longitudinal direction of a component for which the sheet is intended during the heat treatment as claimed in the instant claims 18 and 31 respectively. However, Dahlback ('738) discloses that during the heat treatment the flatness of the sheet was restored (col. 4, lines 52-59). Garzarolli et al. ('104) discloses lengthening a tube during a straightening operation by stretching the tube by at least 0.3% of the initial length of the tube in the longitudinal direction of the tube (col. 4, lines 32-45). The stretching amount range of Garzarolli et al. ('104) overlaps the ranges as claimed in the instant claims 18 and 31. A prima facie case of obviousness exists. See MPEP 2144.05 I. It would have been obvious to one of

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ordinary skill in the art at the time the invention was made to flat the sheet by stretching the sheet by at least 0.3% in a direction corresponding to a longitudinal direction of a component for which the sheet is intended during the heat treatment as disclosed by Garzarolli et al. ('104) in order to generate internal stress in the sheet as discussed by Garzarolli et al. ('104) (col. 4, lines 32-35).

### ***Response to Arguments***

4. The applicant's arguments filed on July 14, 2008 have been fully considered but they are moot in light of the new ground of rejection as discussed above.

### ***Conclusion***

5. This Office action is made non-final. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Weiping Zhu whose telephone number is 571-272-6725. The examiner can normally be reached on 8:30-16:30 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy King/  
Supervisory Patent Examiner, Art  
Unit 1793

WZ

8/13/2008

<div>Application Number</div> <div></div>	Application/Control No.	Applicant(s)/Patent under Reexamination	
	10/538,973	DAHLBACK, MATS	
	Examiner	Art Unit	
	WEIPING ZHU	1793	